



OMEGA PRODUCTS PRIVATE LIMITED

Unit No.50,SDF II, SEEPZ (SEZ) Andheri (East), Mumbai 400 096

Thick Film Ceramic Pressure Sensor Element (OCPS)

DESCRIPTION

Thick Film Ceramic Pressure Sensor Element (OCPS) features advanced ceramic integration technology, compact design, corrosion resistance, no isolation for direct contact with measuring corrosive media, and easy integration with transmitter circuits. It is highly reliable, stable and cost-effective, supporting over 1 Million pressure cycles under rated conditions. The product complies with EU RoHS standards.

APPLICATION

Automotive air conditioning Brake system
Fork lift Air compressor
Tire pressure
Water pressure/level test



SPECIFICATION

Type	Pressure Range (Bar)	Overload Pressure (Bar)	Destruction Pressure (Bar)
OCPS005	0.....5	10	12
OCPS010	0.....10	20	25
OCPS016	0.....16	32	40
OCPS020	0.....20	40	50
OCPS025	0.....25	50	63
OCPS030	0.....30	60	75
OCPS050	0.....50	100	125

PERFORMANCE CHARACTERISTIC

Requirement shall not exceed

Bridge resistance	10K ohms $\pm 30\%$
Operating Temperature Range	-10°C ~ 85°C (-40°C ~ 150°C optional)
Power Supply	4 ~ 30 VDC
Overload Pressure	2 Times full-scale pressure
Supply Voltage	$\leq 5 \sim 4$ mV/V
Insulating Resistor	>1G ohms (Test conditions: 25°C, relative humidity 75% 500VDC)
Storage Temperature Range	-40°C ~ 150°C (Without leadout terminal)
Nonlinearity	Typical: ± 0.2 , Max: ± 0.5 , Unit: %FS
Repeatability	Typical: ± 0.1 , Max: ± 0.5 , Unit: %FS
Hysteresis	Typical: ± 0.2 , Max: ± 0.5 , Unit: %FS
Offset	Min: -0.15, Max: 0.1 , Unit: mV/VDC
Sensitivity	Min: 2, Typical: 3 , Unit: mV/VDC
Offset long-time stability	Typical: ± 0.25 , Max: ± 0.3 , Unit: %FS/year @20°C

Structural Characteristics

Temperature Drift*	Class A $\leq \pm 0.02$ (0°C ~ 70°C)	Unit: %FS/Year @20°C
	Class B $\leq \pm 0.05$ (-10°C ~ 85°C)	
	Class C $\leq \pm 0.1$ (-10°C ~ 85°C) **	

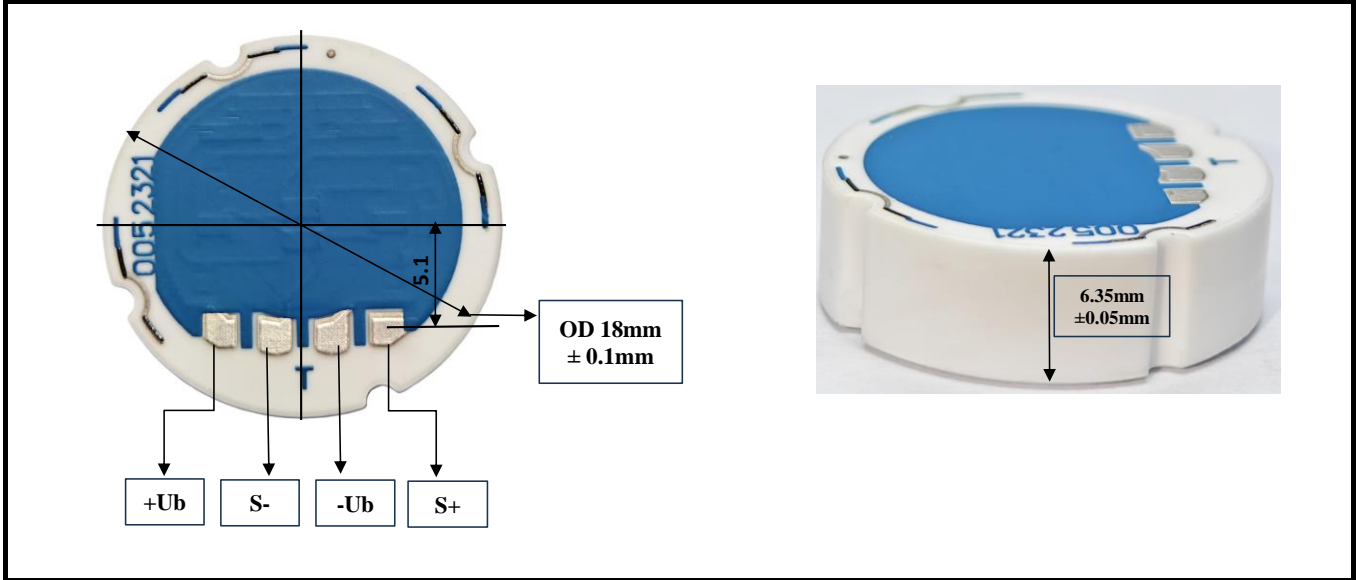
*For products with temperature compensation

*For products without temperature compensation

Structural Characteristics

Contact Material	Al ₂ O ₃ -96%	
Weight	Approx 6g	
Pin Type and Material	No lead	PdAg pad
	Hard leads	Beryllium bronze tin plating (customized)
	Soft leads	Silicone rubber lead (customized)
Sealing ring	Recommendation: silicone or butyrofoam rubber or fluoroelastomer (depending on the use environment)	

Pin Functions			
Pin Number	Symbol	Function Depiction	Soft-Lead Color
1	+Ub	Excitation Voltage positive pole	Black
2	S-	Output negative pole	Yellow
3	-Ub	Excitation Voltage negative pole	Red
4	S+	Output positive pole	Blue



Ordering Info - Part Number : OCPS 010 2
 OCPS - For Product Type
 010 - For Pressure Range
 2 - For Terminal Type, 0 - PdAg pad, 1 - with Hard lead, 2 - with Silicone rubber Soft lead

** Specification is subject to change without notice.*